CLAIMS

1-6.   (Canceled)

7.   (currently amended) A self calibrating network having a plurality of nodes, comprising:

a first node of said plurality of nodes to transmit a test signal and a network lock command, said network lock command ceasing nodes other than said first node and a second node of said plurality of nodes from communicating on said network; and

said second node to receive said test signal and to adjust a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver i) being based on at least one of available criteria comprising a noise measurement value, a propagation delay value, and a bit error value and ii) occurring until receipt of a network unlock command;

wherein said network lock command prevents other nodes on said network other than said first node and said second node from affecting a calibration result experienced by said second node, and wherein said unlock command on said network permits all nodes on said network to again begin communication; and

wherein said first node transmits said test signal and said network lock command for subsequent nodes of said self calibrating network, each of said subsequent nodes adjusting said subsequent node transceiver to optimize said transfer of data between said first node and said subsequent node until receipt of a network unlock command.

8.   (currently amended) The self calibrating network according to claim 7, wherein:

one of said first node, and said second node, and said subsequent node issues an said unlock command on said network, giving permission to all nodes on said network to again begin communication.

9-14.   (Canceled)

15.   (currently amended) A method for self-calibrating a network having a plurality of nodes, comprising:

transmitting a test signal and a network lock command from a first node of said plurality of nodes, said network lock command ceasing nodes other than said first node and a second node of said plurality of nodes from communicating on said network; and

receiving said test signal by said second node; and

adjusting, until receipt of a network unlock command, a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node

transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value, and a bit error value;

wherein said network lock command prevents other nodes on said network other than said first node and said second node from affecting a calibration result experienced by said second node, and wherein said unlock command on said network permits all nodes on said network to again begin communication; and

transmitting, by said first node, said test signal and said network lock command for subsequent nodes of said self calibrating network; and

adjusting, by each of said subsequent nodes, said subsequent node transceiver to optimize said transfer of data between said first node and said subsequent node until receipt of said network unlock command.

16. (currently amended) The method for self calibrating a network according to claim 15, further comprising:

issuing from one of said first node, and said second node, and said subsequent node, an unlock command on said network, giving permission to all nodes on said network to again begin communication.

17-22. (Canceled)

23. (currently amended) A means for self-calibrating a network having a plurality of nodes, comprising:

a transmitter means for transmitting a test signal and a network lock command from a first node node of said plurality of nodes, said network lock command ceasing nodes other than said first node and a second node node of said plurality of nodes from communicating on said network; and

receiver means for receiving said test signal by said second node; and

adjusting means for adjusting, until receipt of a network unlock command, a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value, and a bit error value;

wherein said network lock command prevents other nodes on said network other than said first node and said second node from affecting a calibration result experienced by said second node, and wherein said unlock command on said network permits all nodes on said network to again begin communication; and.

said first node transmitter means transmits said test signal and said network lock command for subsequent nodes of said self calibrating network; and

each of said subsequent nodes comprises corresponding receiving means for receiving said test signal by said subsequent node and corresponding adjusting means for adjusting said subsequent node transceiver to optimize said transfer of data between said first node and said subsequent node until receipt of said network unlock command.

24.   (currently amended) The means for self calibrating a network according to claim 23, further comprising:

issue means for issuing from one of said first node, ~~and~~ said second node, and said subsequent node, an unlock command on said network, ~~giving permission to all nodes on said network to again begin communication~~.